

Claims

1. A carbon black-filled, age-resistant, polyolefin wrapping foil, characterized in that the wrapping foil comprises a carbon black having a pH of 6 to 8.
2. The wrapping foil of claim 1, characterized in that the wrapping foil comprises thermal black, acetylene black or, preferably, lamp black.
3. The wrapping foil of claim 1 or 2, characterized in that the wrapping foil is halogen-free.
4. The wrapping foil of at least one of the preceding claims, characterized in that the wrapping foil is flame-retarded.
5. The wrapping foil of at least one of the preceding claims, characterized in that it has on one or both sides, especially one side, a layer of adhesive, which is preferably based on polyisoprene, ethylene-vinyl acetate copolymer and/or polyacrylate, and if desired has a primer layer between film and adhesive layer, the amount of the adhesive layer being in each case 10 to 40 g/m², preferably 18 to 28 g/m², the bond strength to steel being 1.5 to 3 N/cm, the unwind force being 1.2 to 6.0 N/cm at 300 mm/min unwind speed, preferably 1.6 to 4.0 N/cm, more preferably 1.8 to 2.5 N/cm, and/or the holding power being more than 150 min.
6. The wrapping foil of at least one of the preceding claims, characterized in that it comprises a solvent-free pressure-sensitive adhesive which is produced by coextrusion, melt coating or dispersion coating, preferably a pressure-sensitive dispersion adhesive and in particular one based on polyacrylate, this adhesive being joined to the surface of the carrier foil by means of flame or corona pretreatment or of an adhesion promoter layer which is applied by coextrusion or coating.
7. The wrapping foil of at least one of the preceding claims, characterized in that the fraction of carbon black is at least 5 phr, preferably at least 10 phr.

8. The wrapping foil of at least one of the preceding claims, characterized in that the polyolefin contains propylene as monomer.
- 5 9. The wrapping foil of at least one of the preceding claims, characterized in that it comprises not only the preferred polypropylene polymer but also ethylene-propylene copolymers from the classes of EPM and EPDM polymers.
- 10 10. The wrapping foil of at least one of the preceding claims, characterized in that the carbon black is added as a masterbatch after polyolefin, antioxidant, and flame-retardant filler have been compounded, and is added in particular on the foil-producing installation.
- 15 11. The wrapping foil of at least one of the preceding claims, characterized in that the wrapping foil contains at least 4 phr of a primary antioxidant or at least 0.3 phr, preferably at least 1 phr, of a combination of primary and secondary antioxidants, it also being possible for the primary and secondary antioxidant function to be united in one molecule.
- 20 12. The wrapping foil of at least one of the preceding claims, characterized in that the wrapping foil
has a heat stability of at least 105°C, preferably 125°C after 2000 and in particular after 3000 hours,
has a breaking elongation of at least 100% after 20 days of storage at 136°C,
has a compatibility, when stored on a cable with a polyolefin insulation, of at least
25 105°C after 3000 hours,
has a compatibility, when stored on a cable with a polyolefin insulation, of 125°C after 2000 hours, preferably after 3000 hours,
achieves 140°C after 168 hours and/or
achieves a heat resistance of 170°C (30 minutes).
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- 35 13. The wrapping foil of at least one of the preceding claims, characterized in that it comprises at least one polypropylene having a flexural modulus of less than 900 MPa, preferably of 500 or less, and more preferably of 80 MPa or less, and/or a crystallite melting point of between 120°C and 166°C, preferably below 148°C, more preferably below 145°C.

14. The wrapping foil of at least one of the preceding claims, characterized in that the flame-retardant filler is added at 70 to 200 phr, preferably at 110 to 150 phr, in particular a magnesium hydroxide.

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15. Use of a wrapping foil of at least one of the preceding claims for bundling, protecting, labeling, insulating or sealing ventilation pipes or wires or cables and for sheathing cable harnesses in vehicles or field coils for picture tubes.